

What is claimed is :

1. A device for invalidating plane objects, in particular defective products in the securities sector, such as banknotes and notes of value, by perforating means, the device having a horizontal base plate (9) onto which the objects (14) to be invalidated are placed, and die plates (13, 17, 18) which are vertically movable and parallel to said base plate, and having a drive mechanism by which the die plates can be displaced up and down, wherein the perforating means comprises at least one cutting bushing (23) with a hollow paper drill (19) interacting with the cutting bushing in order to displace the paper scrap in the paper drill.

2. The device as claimed in claim 1, wherein the cutting bushing (23) is provided in the base plate (9), and wherein the paper drill (19) is provided on the die plates (13, 17, 18).

3. The device as claimed in claim 2, wherein the paper drill (19) is designed such that it is open at the top, and wherein the paper scrap is displaced upward.

4. The device as claimed in claim 2, wherein the die plates comprise a guide plate (17) for guiding the paper drill (19), which serves as a pressing plate for the paper products (14) to be invalidated, a drill-receiving plate (18), which receives the paper drills (19), and a pressing plate (13).

5. The device as claimed in claim 3, wherein the die plates comprise a guide plate (17) for guiding the paper drill (19), which serves as a pressing plate for the paper products (14) to be invalidated, a drill-receiving plate (18), which receives the paper drills (19), and a pressing plate (13).

6. The device as claimed in claims 1 to 5, wherein the drive mechanism comprises a hydraulic cylinder (01), which by means of an eccentric shaft (02) moves the pressing plate (13) downward between running rollers (05) against the objects (14) to be invalidated.

1 7. The device as claimed in one of claims 1 to 5, wherein the
2 pressing plate (13) and the receiving plate (18) are connected at least to
3 springs (22).

1 8. The device as claimed in one of claims 1 to 5, wherein stops (16)
2 which limit the upper path of the guide plate (17) in order to pull the paper
3 drills (19) out of the material being punched (14) are provided on the sides of
4 the device.

1 9. The device as claimed in one of claims 1 to 5, wherein the upper
2 ends of the paper drills (19) are open and wherein the paper scrap is pushed
3 out into a support (03), which serves as a container.

1 10. The device as claimed in one of claims 1 to 5, wherein the paper
2 scrap is removed from the container (03) by means of a suction removal
3 device.

1 11. A method of invalidating plane objects, in particular defective
2 products in the securities sector, such as bank notes and notes of value, by
3 perforation, having a device as claimed in claims 1 to 5, which method
4 comprises the following steps:

5
6 (a) collecting the defective products and guiding them onto a base plate
7 of the invalidating machine;

8
9 (b) displacing die plates onto the products to be invalidated;

10
11 (c) invalidating the products by the paper drills;

12
13 (d) lifting the die plates off and pulling the paper drills out of the
14 invalidated products; and

15
16 (e) pushing the products out of the invalidating machine.